

ABSTRACT

Integrated circuits are disclosed that have interconnected programmable logic, and configuration memory. The interconnected programmable logic is connected by a logical interconnection network. The integrated circuits have a configurable function unit including a function unit component, such as a counter or shift register. The integrated circuits further include a configurable decoder, which decodes a value presented by the function unit component based on decoder configuration data. The integrated circuits also have at least one decoder output, which provides information about a comparison of the decoder configuration data with the value presented by the function unit component.